

Applicants : Marshall Medoff et al.
Serial No. : 09/772,593
Filed : January 30, 2001
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Attorney's Docket No.: 08895-019001

AMENDMENTS TO THE DRAWINGS:

The attached replacement sheet of drawings replaces the original sheet. No amendments are being made to the drawing.

Attachment following last page of this Amendment:

Replacement Sheet (1 pages)

REMARKS

Claims 1, 14, 15, 54 and 57 have been amended, and claim 9 has been cancelled herewith. Claims 64-66 are new. No new matter has been introduced. Support for the amendments to claims 1, 14, 15 and 54, and new claims 64 and 65 can be found, e.g., at page 2, lines 15-17 of the Applicant's Specification. Support for new claim 66 can be found, e.g., at page 2, line 4 of the Applicant's Specification.

A replacement photograph (Fig. 1) is submitted herewith. Please replace the formal drawing (photograph) submitted on January 18, 2002 by the enclosed photograph.

An IDS is submitted herewith. Applicants respectfully request that the Examiner consider the enclosed reference.

Claims 1-17, 45-51, 54-57 and 60-63 have been rejected under the doctrine of obviousness-type double patenting over U.S. Patent No. 5,952,105 or U.S. Patent No. 6,448,307. Applicants will file a terminal disclaimer when the Examiner has indicated that the claims are otherwise allowable.

Claims 1-3, 5 and 9-17 have been rejected under 35 U.S.C. §102(b) as being allegedly anticipated by Laver, U.S. Patent No. 5,516,472 ("Laver"). Applicants do not agree with the rejection, but have nevertheless amended independent claims 1, 14 and 15.

As amended, claim 1 features a composite that includes a thermoplastic resin and fiber. The fiber is cellulosic or lignocellulosic fiber that has a length-to-diameter ratio of at least 5.

As amended, claim 14 features a composite that includes polyethylene and fiber. The fiber is cellulosic or lignocellulosic fiber that has a length-to-diameter ratio of at least 5.

As amended, claim 15 features a composite that includes a thermoplastic resin and fiber. The composite has a flexural strength of at least 3,000 psi, and the fiber is cellulosic or lignocellulosic fiber that has a length-to-diameter ratio of at least 5.

Laver discloses that his cellulose materials are "comminuted" to a flour prior to mixing with resin. For example, it is disclosed at column 8, lines 23-27 that (emphasis added)

the cellulose materials are comminuted by conventional particle reduction equipment known to the art. These may include grinders, ball mills, choppers or other equipment capable of reducing the fiber to a flour of a distinct particle size or range of sizes.

In addition, the Examples at the bottom of page 7 disclose wood flour. Laver does not disclose or suggest a cellulosic or lignocellulosic fiber that has a length-to-diameter ratio of at least 5, as claims 1, 14 and 15 now require. Rather, Laver discloses materials in the form of particles (flours), which would inherently have a low length-to-diameter ratio, e.g., approaching 1. In fact, Laver does not fairly disclose a fiber at all, but particles. Applicants submit that, as amended, independent claims 1, 14 and 15 are novel over Laver, as are all claims depending therefrom, and respectfully request that the rejection be withdrawn.

Claims 1-17, 48-51 and 57 have been rejected under 35 U.S.C. §103(a) as being allegedly obvious over Laver. Amended claims 1, 14 and 15 have been summarized above. Amended claims 54 and 57 are summarized below.

As amended, claim 54 features a composite that includes a resin, fiber, and an inorganic additive. The fiber is cellulosic or lignocellulosic fiber that has a length-to-diameter ratio of at least 5.

As amended, claim 57 features a composite that includes a resin and fibers. The fiber is cellulosic or lignocellulosic fiber. At least 50% of the fibers have a length-to-diameter ratio of at least 50.

As discussed above, Laver discloses materials in the form of particles (flours), which would inherently have a low length-to-diameter ratio, e.g., approaching 1. Laver does not disclose or suggest a cellulosic or lignocellulosic fiber that has a length-to-diameter ratio of at least 5, as now required by claims 1, 14, 15, and 54. Regarding claim 57, Laver also does not disclose or suggest a cellulosic or lignocellulosic fiber in which at least 50% of the fibers have a length-to-diameter ratio of at least 50. In fact, Laver does not disclose or suggest any length-to-diameter ratio because he generally discloses particles, i.e., having a length-to-diameter ratio approaching 1.

The Examiner contends that the choice of a cellulosic source would be a clear modification to one of ordinary skill in the art, "especially in view of the teaching in Laver at column 6 (line 30) in reference to "any kind of waste cellulosic material." (page 4, 3rd paragraph of the Office Action). Applicants disagree because different forms of cellulosic materials, e.g., ground cellulosic particles, or cellulosic fibers having a substantial length-to-diameter ratio,

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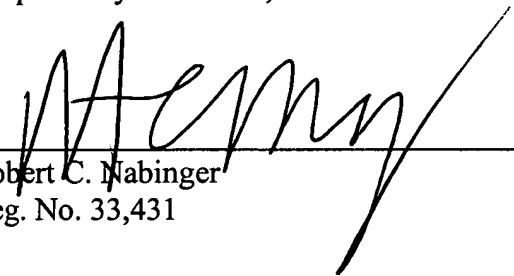
impart different properties to resulting composites. Furthermore, there is no disclosure or suggestion in Laver that providing a fiber having a substantial length-to-diameter is advantageous in any way. In contrast, Applicants state in several places in the Specification, e.g., at page 6, line 9, that the resulting composites are unexpectedly "strong, light-weight, and inexpensive."

Applicants respectfully submit that all claims are in condition for allowance.

Please apply any charges or credits to deposit account 06-1050, referencing Attorney Docket No. 08895-019001.

Respectfully submitted,

Date: June 22, 2005



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